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(54) **FIXED PITCH WIND (OR WATER) TURBINE WITH CENTRIFUGAL WEIGHT CONTROL (CWC)**

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(57) **ABSTRACT**

The Fixed Pitch Wind (Water) turbine is a more productive system than current technology in that it extracts increasing amounts of energy from wind (or water) flows throughout typical operating ranges (25 m/s for wind and 3.4 m/s for tidal). Further, an inherently stronger fixed pitch solution can have greater blade solidity that will, in turn increase torque across the entire operating range.

Extending the low speed shaft brings major and heavy system components to the tower base (for wind) or above water line (tidal) for reduced cost, both initially and on an ongoing basis.

The weight control system acts as a buffer for energy storage that will accommodate gusty or turbulent conditions and also facilitate gear changes as the speed of the rotor changes.